20 ·

ABSTRACT OF THE DISCLOSURE

Image data of optically acquired input images (1) are processed for emphasizing at least one object class. First each pixel point is subjected to a rough classification (10) based on given first criteria that determine whether or not a pixel point is relevant for an object recognition. A reduced image (11) is formed from the relevant pixel points while the irrelevant pixels are omitted. The reduced image (11) is filtered (20) for forming at least two correlated filter images (21, 22, 23) based on given second criteria. Image components relevant for recognition and the mutual allocation of these image components are retained in the filter images. Then, classification images (31A, 32A, 33A) are formed from the filter images by classifiers that work in accordance with predetermined rules. numbers or weighting factors are allocated to each object class. Then, the classification images are merged or fused (40) in accordance with an algorithm to form a combined global decision or global evaluation for each object class. The global decision or evaluation decides, based on the merged images (41A, 41B, 41C) for each pixel point of the reduced image (11) whether the respective pixel point belongs to an object class and if so to which object class.

4028/WGF:ar

USPS EXPRESS MAIL EL 547 896 345 US NOVEMBER 20 2000